

IN THE CLAIMS:

Please cancel Claim 31 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1-3, 5, 16-18, 20, 30, 32, and 33 as follows.

1. (Currently Amended) An information processing apparatus having a step of storing data into storage means, comprising:

key input means for inputting a desired key code;

address receiving means for receiving a first physical address designating a storage position for holding the data in the storage means;

address conversion means for converting ~~[[a]]~~ the first physical address ~~designating a storage position of said the storage means for holding the data to~~ into a second physical address of the storage means based on ~~said the~~ desired key code inputted by said input means; and

storage control means for storing ~~said the~~ data ~~in~~ at a storage ~~area~~ position of ~~said the~~ storage means designated by ~~said the~~ second physical address obtained by said address conversion means.

2. (Currently Amended) The information processing apparatus according to claim 1, wherein said address conversion means performs mutually reversible conversion between said first physical address and said second physical address by the same key code.

3. (Currently Amended) The information processing apparatus according to claim 2, wherein said address conversion means interchanges several address lines of said first physical address based on the desired key code inputted by said key input means to generate said second physical address.

4. (Original) The information processing apparatus according to claim 2, wherein if said data is image data, said address conversion means performs address conversion so as to interchange positions of a predetermined areas divided from the image.

5. (Currently Amended) The information processing apparatus according to claim 2, further comprising key code conversion means for generating a second key code from said input desired key code,

wherein said address conversion means converts said first physical address to said second physical address based on said second key code.

6. (Original) The information processing apparatus according to claim 1, further comprising input selection means for selecting one input destination from plural data input destinations,

wherein data from the input destination selected by said input means is stored into said storage means.

7. (Original) The information processing apparatus according to claim 4, wherein said plural data input destinations include a scanner, a large-capacity storage device and a communication device.

8. (Original) The information processing apparatus according to claim 1, further comprising output selection means for selecting one output destination from plural data output destinations,

wherein data read from said storage means is outputted to the output destination selected by said output selection means.

9. (Original) The information processing apparatus according to claim 6, wherein said plural data output destinations include a printer, a large-capacity storage device, a display and a communication device.

10. (Original) The information processing apparatus according to claim 1, wherein said data is image data.

11. (Original) The information processing apparatus according to claim 1, further comprising a scanner for inputting data to be stored in said storage means and a printer for outputting data stored in said storage means,
wherein said information processing apparatus operates as a copying machine.

12. (Original) The information processing apparatus according to claim 1, wherein a scanner or communication device can be selected as an input source for inputting data to be stored in said storage means, and wherein said communication device and a printer can be selected as an output destination for outputting data from said storage means, further wherein said information processing apparatus operates as a facsimile machine.

13. (Original) The information processing apparatus according to claim 1, further comprising address conversion designation means for designating execution or non-execution of address conversion by said address conversion means.

14. (Original) A data security method for the information processing apparatus in claim 1, comprising the steps of:

for encryption, storing input data into said storage means while converting an address by said address conversion means based on the desired key code inputted from said key input means, and outputting the data as encrypted data to the outside and holding the data; and

for decryption, storing said held data as input data into said storage means while converting the address by said address conversion means based on the same key code as said desired key code inputted from said key input means, and outputting the data as decrypted data to the outside.

15. (Original) A data security method for the information processing apparatus in claim 1, comprising the steps of:

for encryption, storing said key code and input data into said storage means while converting an address by said address conversion means based on the desired key code inputted from said key input means, and outputting them as encrypted data to the outside and holding the data; and

for decryption, storing said held data as input data into said storage means while converting the address by said address conversion means based on the same key code as said desired key code reproduced from said held data, and outputting said data as decrypted data to the outside.

16. (Currently Amended) An information processing method for storing data into storage means, comprising:

a key input step of inputting a desired key code;

an address receiving step of receiving a first physical address designating a storage position for holding the data in the storage means;

an address conversion step of converting ~~[[a]]~~ the first physical address ~~designating a storage position of said the storage means for holding the data to into~~ a second physical address of the storage means based on ~~said the~~ desired key code inputted at said input step; and

a storage control step of storing ~~said the~~ data ~~in at~~ a storage ~~area~~ position of ~~said the~~ storage means designated by ~~said the~~ second physical address obtained at said address conversion step.

17. (Currently Amended) The information processing method according to claim 16, wherein at said address conversion step, mutually reversible conversion is performed between said first physical address and said second physical address by the same key code.

18. (Currently Amended) The information processing method according to claim 16, wherein at said address conversion step, several bits of said first physical address are interchanged based on the desired key code inputted at said key input step, to generate said second physical address.

19. (Original) The information processing method according to claim 17, wherein at said address conversion step, if said data is image data, address conversion is performed so as to interchange positions of a predetermined areas divided from the image.

20. (Currently Amended) The information processing method according to claim 17, further comprising a key code conversion step of generating a second key code from said input desired key code,

wherein at said address conversion step, said first physical address is converted to said second physical address based on said second key code.

21. (Original) The information processing method according to claim 16, wherein said data is image data.

22. (Original) A security method in use of the information processing method in claim 16 in a printer, comprising the steps of:

encrypting received image data by said information processing method and print-outputting the data; and

reading the print-outputted encrypted data by a scanner or copying machine capable of decryption in accordance with the same key as that used in encryption by said information processing method.

23. (Original) A security method in use of the information processing method in claim 16 in a scanner, comprising the steps of:

encrypting read image data by said information processing method; and

print-outputting or decoding the encrypted data by a printer or computer capable of decryption in accordance with the same key as that used in encryption by said information processing method.

24. (Original) A security method in use of the information processing method in claim 16 in a copying machine, comprising the steps of:

encrypting read image data by said information processing method and print-outputting the data; and

reading the print-outputted encrypted data in accordance with the same key as that used in encryption by said information processing method.

25. (Original) A security method in use of the information processing method in claim 16 in a facsimile machine, comprising the steps of:

encrypting read image data by said information processing method and transmitting the data; and

decrypting the received encrypted data in accordance with the same key as that used in encryption by said information processing method and print-outputting the data.

26. (Original) The security method according to claim 25, further comprising the steps of:

print-outputting the received encrypted data; and

reading the print-outputted encrypted data, decrypting the data in accordance with the same key as that used in encryption by said information processing method and print-outputting the data.

27. (Original) A security method in use of the information processing method in claim 16 in a communication device, comprising the steps of:

encrypting data by said information processing method and transmitting the data; and

decrypting the received encrypted data in accordance with the same key as that used in encryption by said information processing method and print-outputting the data.

28. (Original) The security method according to claim 27, wherein said key is embedded in an encryption key to be transmitted.

29. (Original) A security method in use of the information processing method in claim 16 in a computer, comprising the steps of:

encrypting data by said information processing method and storing the data;

and

decrypting the stored encrypted data in accordance with the same key as that used in encryption by said information processing.

30. (Currently Amended) ~~A storage medium for storing an~~ An information processing program ~~in case of~~ for storing data into storage means in a computer-readable format,

~~wherein~~ said information processing program ~~includes~~ comprising:

a key input step of inputting a desired key code;

an address receiving step of receiving a first physical address designating a storage position for holding the data in the storage means;

~~at least~~ an address conversion step of converting ~~[[a]]~~ the first physical address ~~designating a storage position of said~~ the storage means ~~for storing said data~~ into a second physical address of the storage means based on ~~an input~~ the desired key code inputted at said input step; and

a storage control step of storing the data at a storage position of the storage means designated by the second physical address obtained at said address conversion step.

31. (Cancelled)

32. (Currently Amended) The ~~storage medium~~ program according to claim 30, wherein at said address conversion step, mutually reversible conversion is performed between ~~said~~ the first physical address and ~~said~~ the second physical address by the same key code.

33. (Currently Amended) The ~~storage medium~~ program according to claim 30, wherein at said address conversion step, ~~wherein at said address conversion step~~, several bits of ~~said~~ first physical address are interchanged based on the desired key code inputted at said key input step, to generate ~~said~~ the second physical address.